Level 1 Threat Residential and Commercial Development

Level 2 Threat: Housing and Urban Areas

**Description:** Human cities, towns, and settlements including non-housing development typically integrated with housing

Species Associated With This Stressor:

Class

Actinopterygii (Ray-finned Fishes)

**SGCN Category** 

Species: Alosa pseudoharengus (Alewife)

2

Report Date: January 13, 2016

Total SGCN: 1: 27

**Severity:** Moderate Severity

Actionability: Moderately actionable

Notes: Residential and urban development can lead to stressed runs. The specific causes of impact are increased non-point source pollution (heavy metals and nutrient inputs), increased turbidity, water withdrawals, disturbance of stream corridor and tree canopy over stream. Liklihood is high and increasing (high certainty), current spatial extent is Southern Maine, but expanding along coast, so actionability is moderate, i.e. the threat can be minimized in newly developing areas.

Species: Alosa sapidissima (American Shad)

**Severity:** Moderate Severity

Actionability: Moderately actionable

Notes: Residential and urban development can lead to stressed runs. The specific causes of impact are increased non-point source pollution (heavy metals and nutrient inputs), increased turbidity, water withdrawals, disturbance of stream corridor and tree canopy over stream. Liklihood is high and increasing (high certainty), current spatial extent is Southern Maine, but expanding along coast, so actionability is moderate, i.e. the threat can be minimized in newly developing areas.

Species: Salvelinus alpinus oquassa (Arctic Charr)

1

Severity: Moderate Severity

Actionability: Actionable with difficulty

Notes: Green Lake population only

Species: Salmo salar (Atlantic Salmon)

1

Severity: Severe

Actionability: Moderately actionable

Notes: Residential and urban development impacts the streams water quality, Atlantic salmon habitat quality (rearing and spawning habitat), reduces stream canopy, increases stream temperature. Likelihood is

high and increasing. Spatial extent is Maine.

Species: Alosa aestivalis (Blueback Herring)

1

Severity: Severe

Actionability: Moderately actionable

Notes: Residential and urban development can lead to stressed runs. The specific causes of impact are increased non-point source pollution (heavy metals and nutrient inputs), increased turbidity, water withdrawals, disturbance of stream corridor and tree canopy over stream. Liklihood is high and increasing (high certainty), current spatial extent is Southern Maine, but expanding along coast, so

actionability is moderate, i.e. the threat can be minimized in newly developing areas.

Species: Notropis bifrenatus (Bridle Shiner)

2

**Severity:** Moderate Severity

**Actionability:** Moderately actionable

Notes: Sedimentation and siltation subsequent to surface water run-off is a concern. BDS are known to be

affected by poor water quality associated with sedimentation and siltation of habitats.

Species: Osmerus mordax (Rainbow Smelt)

1

Severity: Severe **Actionability:** Moderately actionable

Notes: Residential and urban development has been statistically correlated with depleted smelt runs. The specific causes of impact are increased non-point source pollution (heavy metals and nutrient inputs), water withdrawals, disturbance of stream corridor and tree canopy over stream. Liklihood is high and increasing (high certainty), current spatial extent is Southern Maine, but expanding along coast, so actionability is moderate, i.e. the threat can be minimized in newly developing areas.

**Species:** *Esox americanus americanus* (Redfin Pickerel)

2

Severity: Moderate Severity

Actionability: Moderately actionable Notes: RPK occur in coastal, southern ME areas with high development pressures.

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#### **Level 1 Threat Residential and Commercial Development**

Level 2 Threat: Housing and Urban Areas

Class	S Amp	hibia (Amphibians)		SGCN Category
	Species: Ambystoma later	rale (Blue-spotted Salamander	-)	2
	Severity:	Severe	Actionability: Moderately actionable	
	Notes:	Loss and degradation of verna especially in southern and cer	al pools and pocket swamps and the surrounding critical national metal ME	terrestrial habitat,
	Species: Lithobates pipier			2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Wetland habitat loss and deg	radation of riparian habitat quality and function	
	Species: Gyrinophilus por	<b>ohyriticus porphyriticus</b> (North	nern Spring Salamander)	2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:		mited protections; habitat loss and degradation of the sh rian habitat quality and function	oreland zone
Class	S Aves	(Birds)		SGCN Category
	Species: Sterna paradisae	a (Arctic Tern)		1
	•	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Human disturbance	•	
	Species: Ammodramus sa	vannarum (Grasshopper Spari	row)	1
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Species: Tringa flavipes (	Lesser Yellowlegs)		1
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Can mitigate impacts through	environmental permit review recommendations.	
	Species: Falco peregrinus	(Peregrine Falcon)		1
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Protect important nesting and	d foraging habitat from residential and commercial devel	opment.
	Species: Calidris canutus i	r <b>ufa</b> (Red Knot)		1
	Severity:	Moderate Severity	Actionability: Highly actionable	
	Notes:	Can minimize impacts with re through environmental permi	commendations that avoid, mitigate or compensate projit review process.	ect impacts
	Species: Sterna dougallii	(Roseate Tern)		1
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Lack of Knowledge		
	Species: Arenaria interpre	es (Ruddy Turnstone)		2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Development impacts can be	mitigated through environmental permit review process.	
	Species: Calidris alba (Sar	nderling)		2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Habitat loss from developmen	nt can be mitigated through environmental permit review	process.
	Species: Calidris pusilla (S	Semipalmated Sandpiper)		2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Habitat loss from developmen	nt can be mitigated through environmental permit review	<i>I</i> .
	Species: Tringa solitaria (	Solitary Sandpiper)		2
	•	Moderate Severity	Actionability: Highly actionable	
	Notes:	Impacts from development ca	an be mitigated through environmental review process.	
	And Urhan Areas Group Page	2 - f 10	CCCN Chuanau P	enort - Page 2 of 10

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#### **Level 1 Threat Residential and Commercial Development**

Level 2 Threat: Housing and Urban Areas

Class	S Aves	(Birds)	SGCN Category		
-	Species: Numenius phaeo	pus (Whimbrel)	2		
	•	Moderate Severity Actionability: Moderately actionable			
	Notes:	Habitat loss from development can be minimized through environmental permit revie	w.		
	Species: Hylocichla muste	lina (Wood Thrush)	1		
	Severity:	Moderate Severity Actionability: Moderately actionable			
	Notes:	Habitat loss and or fragmentation to development			
Class	Biva	lvia (Marine And Freshwater Molluscs)	SGCN Category		
	Species: Alasmidonta varicosa (Brook Floater)				
	Severity:	Moderate Severity Actionability: Moderately actionable			
	Notes:	In riparian zone where forest canopy is lost or degraded and/or water quality is impact where increased access/use directly impacts stream bottom and/or water quality	ted; in stream bed		
	Species: Leptodea ochrace	ea (Tidewater Mucket)	1		
	Severity:	Moderate Severity Actionability: Moderately actionable			
	Notes:	In riparian zone where forest canopy is lost or degraded and/or water quality is impact where increased access/use directly impacts stream bottom and/or water quality	ted; in stream bed		
	Species: Lampsilis cariosa	(Yellow Lampmussel)	1		
	Severity:	Moderate Severity Actionability: Moderately actionable			
	Notes:	In riparian zone where forest canopy is lost or degraded and/or water quality is impact where increased access/use directly impacts stream bottom and/or water quality	ted; in stream bed		
Class	Gast	ropoda (Aquatic And Terrestrial Snails)	SGCN Category		
	Species: Vertigo paradoxo	(Mystery Vertigo)	•		
	•	( / / 6-/	2		
	-	Moderate Severity Actionability: Moderately actionable	2		
	Severity:				
Class	Severity: Notes:	Moderate Severity Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in dons	se colonies could		
Class	Severity: Notes:	Moderate Severity Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  cta (Insects)	se colonies could		
Class	Severity: Notes:	Moderate Severity  Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  cta (Insects)  ata (A Noctuid Moth)	se colonies could  SGCN Category		
Class	Severity: Notes:  Insection  Species: Chaetaglaea cera Severity:	Moderate Severity  Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  cta (Insects)  ata (A Noctuid Moth)	se colonies could  SGCN Category  2		
Class	Severity: Notes:  Insectors: Chaetaglaea cera Severity: Notes:	Moderate Severity  Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  cta (Insects)  ata (A Noctuid Moth)  Severe  Actionability: Moderately actionable	se colonies could  SGCN Category  2		
Class	Severity: Notes:  Insectors: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva	Moderate Severity  Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in donsextirpate local populations  cta (Insects)  ata (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in severe	se colonies could  SGCN Category  2  Southern ME		
Class	Severity: Notes:  Insector  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity:	Moderate Severity  Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  cta (Insects)  ata (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in sanicus (American Bumble Bee)	se colonies could  SGCN Category  2  Southern ME		
Class	Severity: Notes:  Insection  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity: Notes:	Moderate Severity  Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  cta (Insects)  ata (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanicus (American Bumble Bee)  Moderate Severity  Actionability: Moderately actionable	se colonies could  SGCN Category  2  Southern ME		
Class	Severity: Notes:  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity: Notes: Species: Bombus ashtoni	Moderate Severity  Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  Cta (Insects)  Outa (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in simicus (American Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat	SGCN Category  2  Southern ME  2		
Class	Severity: Notes:  Insection  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity: Notes: Species: Bombus ashtoni Severity:	Moderate Severity  Actionability: Moderately actionable  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  cta (Insects)  ata (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanicus (American Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)	SGCN Category  2  Southern ME  2		
Class	Severity: Notes:  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity: Notes: Species: Bombus ashtoni Severity: Notes: Species: Spe	Moderate Severity  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  Cta (Insects)  Cta (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanicus (American Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Barrens Itame)	SGCN Category  2  Southern ME  2		
Class	Severity: Notes:  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity: Notes: Species: Bombus ashtoni Severity: Notes: Species: Speranza exonera Severity:	Moderate Severity  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  Cta (Insects)  Cta (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanicus (American Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  Cata (Barrens Itame)  Severe  Actionability: Moderately actionable	SGCN Category 2 southern ME 2 2		
Class	Severity: Notes:  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity: Notes: Species: Bombus ashtoni Severity: Notes: Species: Speranza exonera Severity: Notes:	Moderate Severity  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  Cta (Insects)  Cta (A Noctuid Moth)  Severe  Actionability:  Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanicus (American Bumble Bee)  Moderate Severity  Actionability:  Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability:  Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability:  Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  Cata (Barrens Itame)  Severe  Actionability:  Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanian in the s	SGCN Category 2 southern ME 2 2		
Class	Severity: Notes:  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity: Notes: Species: Bombus ashtoni Severity: Notes: Species: Speranza exonera Severity: Notes: Species: Speranza exonera Severity: Notes: Species: Metarranthis api	Moderate Severity  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  Cta (Insects)  Cta (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanicus (American Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  Cata (Barrens Itame)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanical (Barrens Metarranthis Moth)	SGCN Category 2 southern ME 2 2		
Class	Severity: Notes:  Species: Chaetaglaea cera Severity: Notes: Species: Bombus pensylva Severity: Notes: Species: Bombus ashtoni Severity: Notes: Species: Speranza exonera Severity: Notes: Species: Metarranthis api Severity:	Moderate Severity  Development around the few small base-rich outcrops where this snail occurrs in done extirpate local populations  Cta (Insects)  Cta (A Noctuid Moth)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanicus (American Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  (Ashton's Cuckoo Bumble Bee)  Moderate Severity  Actionability: Moderately actionable  Habitat loss and fragmentation; can also create foraging habitat  Cata (Barrens Itame)  Severe  Actionability: Moderately actionable  Habitat loss and fragmentation; pine barren habitat is prime land for development in stanical (Barrens Metarranthis Moth)	se colonies could  SGCN Category  2  southern ME  2  couthern ME  2		

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#### **Level 1 Threat Residential and Commercial Development**

Level 2 Threat: Housing and Urban Areas

_	s Insec	cta (Insects)	CN Category
	Species: Ophiogomphus co	olubrinus (Boreal Snaketail)	1
	Severity:	Moderate Severity Actionability: Moderately actionable	
	Notes:	Degradation of the riparian zone affects water quality and roosting/feeding habitat	
	Species: Cicindela margini	ipennis (Cobblestone Tiger Beetle)	1
	Severity:	Moderate Severity Actionability: Moderately actionable	
	Notes:	Development and accompanying increase in human activities on river cobble bars can thre species	aten this
	Species: Plebejus idas emp	petri (Crowberry Blue)	2
	Severity:	Moderate Severity Actionability: Moderately actionable	
	Notes:	Poorly planned coastal development in the riparian zone could alter peatland hyrology and habitat	d/or nectar
	Species: Erora laeta (Early	y Hairstreak)	2
	Severity:	Moderate Severity Actionability: Actionable with difficulty	
	Notes:	Habitat loss and fragmentation; especially hard to address for this species since we lack sp its occurrences	atial data on
	Species: Hemileuca maia	maia (Eastern Buckmoth)	2
	Severity:	Severe Actionability: Moderately actionable	
		Habitat loss and fragmentation; pine barren habitat is prime land for development in soutl	nern ME
	Species: Satyrium edward		2
	Severity:	•	
		Habitat restricted to southern ME where loss and fragmentation to development is on-goi	
	Species: Callophrys hessel		1
	Severity:	•	
		Few occurrences documented; all in areas of southern Maine with active development in v	
	•	(Indiscriminate Cuckoo Bumble Bee )	2
	•	Moderate Severity Actionability: Moderately actionable	
		Habitat loss and fragmentation; can also create foraging habitat	2
	Species: Callophrys gryner		2
	Severity:		
	Species: Enallagma latera	Habitat loss and fragmentaion in southern ME	2
	•	Moderate Severity Actionability: Moderately actionable	2
	•	Habitat loss and riparian zone degradation in an area of the state with relatively rapid deve	elonment
		urtha (Pine Barrens Zanclognatha)	1
	Severity:		1
	•	Habitat loss and fragmentation; pine barren habitat is prime land for development in soutl	nern MF
	Species: Citheronia sepulc		2
	Severity:		_
	•	Habitat loss and fragmentation; pine barren habitat is prime land for development in soutl	nern ME
	Species: Psectraglaea carr		2
	Severity:		
	•	Habitat loss and fragmentation; pine barren habitat is prime land for development in soutl	NAT

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#### **Level 1 Threat Residential and Commercial Development**

Level 2 Threat: Housing and Urban Areas

Class	Inse	cta (Insects)		SGCN Category
Species:	Species: Ophiogomphus howei (Pygmy Snaketail)			2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Degradation of the ripa	arian zone affects water quality and roosting/feeding habitat	
Species:	Species: Gomphus quadricolor (Rapids Clubtail)			2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Degradation of the ripa	arian zone affects water quality and roosting/feeding habitat	
Species:	Williamsonia lint	<b>neri</b> (Ringed Boghaunte	er)	1
	Severity:	Severe	Actionability: Moderately actionable	
	Notes:	Habitat loss and riparia	an zone degradation in an area of the state with relatively rap	id development
Species:	Bombus affinis (	Rusty-patched Bumble E	Bee)	1
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Habitat loss and fragm	nentation; can also create foraging habitat	
Species:	Enallagma pictun	n (Scarlet Bluet)		2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Habitat loss and riparia	an zone degradation in an area of the state with relatively rap	id development
Species:	Erynnis brizo (Sle	epy Duskywing)		2
	Severity:	Severe	Actionability: Moderately actionable	
	Notes:	Habitat restricted to so	outhern ME where loss and fragmentation to development is	on-going
Species:	Lanthus vernalis	(Southern Pygmy Clubta	ail)	2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Headwater streams red and roosting/feeding h	ceive limited protections; degradation of the riparian zone aff	ects water quality
Species:	Lycia rachelae (T	wilight Moth)		2
	Severity:	Severe	Actionability: Moderately actionable	
	Notes:	Habitat loss and fragm	nentation; pine barren habitat is prime land for development i	n southern ME
Species:	Cicindela ancocis	conensis (White Mount	tain Tiger Beetle)	2
	Severity:	Moderate Severity	Actionability: Moderately actionable	
	Notes:	Development and accordant threaten this speci	ompanying increase in human activities on river cobble bars, s ies	and bars, and banks
Class	Man	nmalia (Mammals)		SGCN Categor
Species:	Sylvilagus transit	<i>ionalis</i> (New England C	Cottontail)	1
	Severity:	Moderate Severity	Actionability: Actionable with difficulty	
	Notes:		elopment in S. Maine continues to fragment NEC habitat. How r loss of habitat, which may lessen the impact of developmen	
Class	Merc	ostomata (Horsesh	oe Crabs And Sea Scorpions)	SGCN Categor
Species:	Species: Limulus polyphemus (Horseshoe Crab)			1
	Severity:	Severe	Actionability: Moderately actionable	
	Notes:	_	f estuaries and coastal areas cause decrease in available matin age habitat. Liklihood is high and increasing (high certainty), c	

is most severe in Southern Maine, but expanding along coast, so actionability is moderate, i.e. the

threat can be minimized in newly developing areas.

#### **Level 1 Threat Residential and Commercial Development**

Level 2 Threat: Housing and Urban Areas

Class Reptilia (Reptiles) SGCN Category

Species: Emydoidea blandingii (Blanding's Turtle)

1

1

Severity: Severe Actionability: Moderately actionable

Notes: Habitat loss, degradation, and fragmentation from development and increased human activity

Species: Thamnophis sauritus (Eastern Ribbon Snake)

Severity: Severe

2

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Severity: Severe Actionability: Moderately actionable

Notes: Habitat loss and fragmentation from development

Species: Coluber constrictor constrictor (Northern Black Racer)

Notes: Habitat loss from development and associated fragmentatation and anthropogenic activities are

Actionability: Moderately actionable

substantial threats

Species: Clemmys guttata (Spotted Turtle)

1

Severity: Severe Actionability: Moderately actionable

Notes: Habitat loss, degredation, and fragmentation from development and increased human activity

Species: Glyptemys insculpta (Wood Turtle)

1

Severity: Severe Actionability: Moderately actionable

Notes: Habitat loss, degredation, and fragmentation from development and increased human activity

#### **Habitats Associated With This Stressor:**

Macrogroup Agricultural

Habitat System Name: Pasture-Hay

Notes: Development of farmland higher in southern, central, and coastal ME

Macrogroup Boreal Upland Forest

Habitat System Name: Acadian Low Elevation Spruce-Fir-Hardwood Forest

Notes: Development is generally a lower stressor moving north and into unorganized towns; boreal upland forest had

comparatively low predicted development in Anderson et al (2013)

Habitat System Name: Acadian Sub-boreal Spruce Flat

Notes: Development is generally a lower stressor moving north and into unorganized towns; boreal upland forest had

comparatively low predicted development in Anderson et al (2013)

Habitat System Name: Acadian-Appalachian Montane Spr-Fir-Hwd Forest

Notes: Development is generally a lower stressor moving north and into unorganized towns; boreal upland forest had

comparatively low predicted development in Anderson et al (2013)

Habitat System Name: Boreal Jack Pine-Black Spruce Forest

Notes: Development is generally a lower stressor moving north and into unorganized towns; boreal upland forest had

comparatively low predicted development in Anderson et al (2013)

Macrogroup Central Hardwood Swamp

Habitat System Name: North-Central Interior Wet Flatwoods

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Macrogroup Central Oak-Pine

Habitat System Name: Central Appalachian Dry Oak-Pine Forest

Notes: Residential development rates highest in suburban areas of southern/coastal ME

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**Level 1 Threat Residential and Commercial Development** 

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Macrogroup Central Oak-Pine

Habitat System Name: Central Appalachian Pine-Oak Rocky Woodland

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Habitat System Name: North Atlantic Coastal Plain Hardwood Forest

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Habitat System Name: North Atlantic Coastal Plain Maritime Forest

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Habitat System Name: Northeastern Interior Pine Barrens

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Macrogroup Coastal Grassland & Shrubland

Habitat System Name: Northern Atlantic Coastal Plain Dune and Maritime Grassland

**Notes:** Many dunes have been and continue to be impacted, despite some legal protections

Habitat System Name: Northern Atlantic Coastal Plain Sandy Beach

Notes: Many dunes have been and continue to be impacted, despite some legal protections

Macrogroup Coastal Plain Peat Swamp

Habitat System Name: North Atlantic Coastal Plain Basin Peat Swamp

**Notes:** Many AWC Swamps are conserved, but those in private ownership remain vulnerable due to relatively high development

in southern and coastal ME

Macrogroup Emergent Marsh

Habitat System Name: Laurentian-Acadian Freshwater Marsh

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Macrogroup Glade, Barren and Savanna

Habitat System Name: Central Appalachian Alkaline Glade and Woodland

Notes: Many areas have been conserved, but private lands remain vulnerable to development

Macrogroup Intertidal Gravel Shore

Habitat System Name: High Intertidal

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area

and functions

Habitat System Name: Lower Intertidal

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area

and functions

Habitat System Name: Mid-Intertidal

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area

and functions

Macrogroup Intertidal Sandy Shore

Habitat System Name: Sand Beach

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area

and functions

Habitat System Name: Sand Flat

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area

and functions

Report Date: January 13, 2016

**Level 1 Threat Residential and Commercial Development** 

Level 2 Threat: Housing and Urban Areas

Macrogroup Intertidal Sandy Shore

Habitat System Name: Submerged Aquatic Vegetation

Notes: Shoreline development can introduce foot and vehicle traffic, pets, noise, light, and trash that can degrade habitat area

and functions

Macrogroup Intertidal Tidal Marsh (peat-forming)

Habitat System Name: Acadian Coastal Salt Marsh

Notes: Runoff from adjacent development may add excess nutrients, sediment, heavy metals, etc.

Habitat System Name: Coastal Plain Tidal Marsh

Notes: Runoff from adjacent development may add excess nutrients, sediment, heavy metals, etc.

Macrogroup Lakes and Ponds

Habitat System Name: Vernal Pool

Notes: Poorly buffered development has significant impacts on vernal pool wildlife

Macrogroup Northeastern Floodplain Forest

Habitat System Name: Laurentian-Acadian Floodplain Systems

Notes: Floodplain forests (and adjacent uplands) had relatively high predicted development rates in Anderson et al (2013)

Macrogroup Northern Hardwood & Conifer

Habitat System Name: Appalachian (Hemlock)-Northern Hardwood Forest

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Habitat System Name: Laurentian-Acadian Northern Hardwoods Forest

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Habitat System Name: Laurentian-Acadian Pine-Hemlock-Hardwood Forest

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Habitat System Name: Laurentian-Acadian Red Oak-Northern Hardwood Forest

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Habitat System Name: Northeastern Coastal and Interior Pine-Oak Forest

Notes: Residential development rates highest in suburban areas of southern/coastal ME

Macrogroup Northern Swamp

Habitat System Name: Acadian-Appalachian Conifer Seepage Forest

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: Laurentian-Acadian Alkaline Conifer-Hardwood Swamp

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: North-Central Appalachian Acidic Swamp

**Notes:** Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: North-Central Interior and Appalachian Rich Swamp

**Notes:** Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: Northern Appalachian-Acadian Conifer-Hardwood Acidic Swamp

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Macrogroup Outcrop & Summit Scrub

Habitat System Name: Laurentian-Acadian Calcareous Rocky Outcrop

Notes: Outcrops may be attractive for development of second home sites

Report Date: January 13, 2016

**Level 1 Threat Residential and Commercial Development** 

Level 2 Threat: Housing and Urban Areas

Macrogroup Outcrop & Summit Scrub

Habitat System Name: Northern Appalachian-Acadian Rocky Heath Outcrop

Notes: Outcrops may be attractive for development of second home sites

Macrogroup Rivers and Streams

Habitat System Name: Ephemeral

Habitat System Name: Headwaters and Creeks

Macrogroup Ruderal Shrubland & Grassland

Habitat System Name: Introduced Shrubland

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; reverting fields are

probably more at risk than blueberry barrens

Habitat System Name: Powerline Right-of-Way

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; reverting fields are

probably more at risk than blueberry barrens

Habitat System Name: Ruderal Upland - Old Field

Notes: Industrial/commercial development rates highest in urban/suburban areas of southern/coastal ME; reverting fields are

probably more at risk than blueberry barrens

Macrogroup Wet Meadow-Shrub Marsh

Habitat System Name: Introduced Wetland and Riparian Vegetation

Notes: Most future impacts associated with secondary effects including runoff, landscape context etc.

Habitat System Name: Laurentian-Acadian Wet Meadow-Shrub Swamp

**Notes:** Most future impacts associated with secondary effects including runoff, landscape context etc.

Report Date: January 13, 2016

**Level 1 Threat Residential and Commercial Development** 

Level 2 Threat: Housing and Urban Areas

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.